

TABLE M.5.6.2.2—National Ignition Facility Chemical Accident Consequences (Median Meteorology)

ERPG-2 ^a Concentration (ppm)	ERPG-3 ^a Concentration (ppm)	Noninvolved Worker		Site Boundary		ERPG-2 Distance (meters)
		Average Predicted Concentration (ppm)	Fraction of ERPG-2	Average Predicted Concentration (ppm)	Fraction of ERPG-2	
Release of nitric acid solution						
6	78	199	33.2	17.6	2.93	604
Release of acetone						
8,500	8,500	279	0.033	279	0.033	11
Mercury release from ignitrons						
0.25	0.5	0.0153	0.0612	0.0098	0.0392	23
Aircraft crash release of mercury						
0.25	0.5	0	0	0	0	< 10
Earthquake release of lithium hydride ^b						
0.31	1.56	0	0	0	0	< 10
Earthquake release of beryllium ^b						
0.068	0.27	0	0	0	0	< 10
Earthquake release of thorium ^b						
5.27	26.37	0	0	0	0	< 10
Earthquake release of uranium ^b						
0.103	1.03	0	0	0	0	< 10

Source: LLNL 2003d.

^a ERPG=Emergency Response Planning Guideline.^b Smaller amounts used for No Action and Reduced Action Alternatives.

ppm = parts per million.

TABLE M.5.6.2.2–3.—National Ignition Facility Chemical Accident Consequences (Unfavorable Meteorology)

ERPG-2 ^a Concentration (ppm)	ERPG-3 ^a Concentration (ppm)	Noninvolved Worker		Site Boundary		ERPG-2 Distance (meters)
		Average Predicted Concentration (ppm)	Fraction of ERPG-2	Average Predicted Concentration (ppm)	Fraction of ERPG-2	
Release of nitric acid solution						
6	78	394	65.7	31.8	5.3	1,100
Release of acetone						
8,500	8,500	552	0.065	552	0.065	30
Mercury release from ignitrons						
0.25	0.5	0.25	1.0	0.164	0.66	100
Aircraft crash release of mercury						
0.25	0.5	0	0	0	0	11
Earthquake release of lithium hydride ^b						
0.31	1.56	0.1076	0.35	0	0	58
Earthquake release of beryllium ^b						
0.068	0.27	0	0	0	0	44
Earthquake release of thorium ^b						
5.27	26.37	0.00128	2.43×10^{-4}	0	0	< 10
Earthquake release of uranium ^b						
0.103	1.03	0.00262	0.025	0	0	16

Source: LLNL 2003d.

^a ERPG=Emergency Response Planning Guideline.^b Smaller amounts used for No Action and Reduced Action Alternatives.

ppm = parts per million.